MG28F303E**
MG28F304E**

Microwave Oven

Owner's instructions & Cooking guide

imagine the possibilities

Thank you for purchasing this Samsung product.

Please be advised that the Samsung warranty does NOT cover service calls to explain product operation, correct improper installation, or perform normal cleaning or maintenance.

Planet First **100 % Recycled Paper**

This manual is made with 100 % recycled paper.

SAMSUNG

contents

Safety information **2**
Quick look-up guide **11**
Oven features **12**
Oven 12
Control panel 12
Accessories 13
Oven use **14**
How a microwave oven works 14
Checking that your oven is operating correctly 14
Setting the time 15
Cooking / reheating 15
Power levels 16
Adjusting the cooking time 16
Stopping the cooking 16
Manual defrosting food 16
Using the auto defrosting feature 17
Using the auto defrost programmes 17
Power steam cooking guide (MG28F303EF*, MG28F303EJ*, MG28F304EF*, MG28F304EJ* models only) 17
Using the crusty plate (MG28F303EC*, MG28F303EJ*, MG28F304EC*, MG28F304EJ* models only) 19
Choosing the accessories 20
Grilling 20
Combining microwaves and the grill 21
Using the turntable on/off features 21
Cookware guide **22**
Cooking guide **23**
Troubleshooting and error code **30**
Troubleshooting 30
Technical specifications **31**

safety information

USING THIS INSTRUCTION BOOKLET

You have just purchased a SAMSUNG microwave oven. Your Owner's Instructions contain valuable information on cooking with your microwave oven:

- Safety precautions
- Suitable accessories and cookware
- Useful cooking tips
- Cooking tips

LEGEND FOR SYMBOLS AND ICONS

WARNING — Hazards or unsafe practices that may result in **severe personal injury or death**.

CAUTION — Hazards or unsafe practices that may result in **minor personal injury or property damage**.

- Warning; Fire hazard
- Warning; Hot surface
- Warning; Electricity
- Warning; Explosive material
- Do NOT attempt.
- Do NOT touch.
- Do NOT disassemble.
- Follow directions explicitly.
- Unplug the power plug from the wall socket.
- Make sure the machine is grounded to prevent electric shock.
- Call the service center for help.
- Note
- Important

MG28F303EAW_EF_DE68-04179L-00_EN.indd 2 2014-04-11 8:23:05

IMPORTANT SAFETY INSTRUCTIONS

READ CAREFULLY AND KEEP FOR FUTURE REFERENCE.

Make sure that these safety precautions are obeyed at all times.

Before using the oven, confirm that the following instructions are followed.

⚠ WARNING (Microwave function only)
WARNING: If the door or door seals are damaged, the oven must not be operated until it has been repaired by a competent person.
WARNING: It is hazardous for anyone other than a competent person to carry out any service or repair operation that involves the removal of a cover which gives protection against exposure to microwave energy.
This appliance is intended to be used in household only.

WARNING: Only allow children to use the oven without supervision when adequate instructions have been given so that the child is able to use the oven in a safe way and understands the hazards of improper use.
WARNING: This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children unless they are aged from 8 years and above and supervised.
Only use utensils that are suitable for use in microwave ovens.
When heating food in plasitic or paper containers, keep an eye on the oven due to the possibility of ignitions.

MG28F303EAW_EF_DE68-04179L-00_EN.indd 3 2014-04-11 8:23:06

★	The microwave oven is intended for heating food and beverages. Drying of food or clothing and heating of warming pads, slippers, sponges, damp cloth and similar may lead to risk of injury, ignition or fire.
⇄	If smoke is emitted, switch off or unplug the appliance and keep the door closed in order to stifle any flames.
★	**WARNING:** Microwave heating of beverages can result in delayed eruptive boiling, therefore care must be taken when handling the container.
★	**WARNING:** The contents of feeding bottles and baby food jars shall be stirred or shaken and the temperature checked before consumption, in order to avoid burns.
⃠	Eggs in their shell and whole hard-boiled eggs should not be heated in microwave ovens since they may explode, even after microwave heating has ended.
★	The oven should be cleaned regularly and any food deposites removed.
☛	Failure to maintain the oven in a clean conditioin could lead to deterioration of the surface that could adversely affect the life of the appliance and possibly result in a hazardous situation.
⃠	The appliance is not intended for installing in road vehicles, caravans and similar vehicles etc.
★	This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
★	Children should be supervised to ensure that they do not play with the appliance.
✆	If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
⃠	**WARNING:** Liquids or other foods must not be heated in sealed containers since they are liable to explode;

MG28F303EAW_EF_DE68-04179L-00_EN.indd 4 2014-04-11 8:23:07

	The appliance should not be cleaned with a water jet.
	This oven should be positioned proper direction and height permitting easy access to cavity and control area.
	Before using the your oven first time, oven should be operated with the water during 10 minute and then used.
	If the oven generates a strange noise, a burning smell, or smoke is emitted, unplug the power plug immediately and contact your nearest service center.
	The microwave oven has to be positioned so that plug is accessible.
	The microwave oven is intended to be used on the counter or counter top use only, the microwave oven shall not be placed in a cabinet.

⚠ WARNING (Oven function only) - Optional	
	WARNING: When the appliance is operated in the combination mode, children should only use the oven under adult supervision due to the temperatures generated.

	During use the appliance becomes hot. Care should be taken to avoid touching heating elements inside the oven.
	WARNING: Accessible parts may become hot during use. Young children should be kept away.
	A steam cleaner is not to be used.
	WARNING: Ensure that the appliance is switched off before replacing the lamp to avoid the possibility of electric shock.
	WARNING: The appliance and its accessible parts become hot during use. Care should be taken to avoid touching heating elements. Children less than 8 years of age shall be kept away unless continuously supervised.
	The temperature of accessible surfaces may be high when the appliance is operating.
	The door or the outer surface may get hot when the appliance is operating.
	Keep the appliance and its cord out of reach of children less than 8 years.

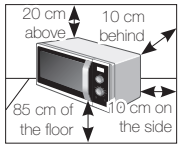
MG28F303EAW_EF_DE68-04179L-00_EN.indd 5 2014-04-11 8:23:08

★	This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
⃠	Do not use harsh abrasive cleaners or sharp metal scrapers to clean the oven door glass since they can scratch the surface, which may result in shattering of the glass.
⃠	Appliances are not intended to be operated by means of an external timer or separate remote-control system.

This product is a Group 2 Class B ISM equipment. The definition of group 2 which contains all ISM equipment in which radio-frequency energy is intentionally generated and/or used in the form of electromagnetic radiation for the treatment of material, and EDM and arc welding equipment.
For Class B equipment is equipment suitable for use in domestic establishments and in establishments directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

INSTALLING YOUR MICROWAVE OVEN

Place the oven on a flat level surface 85 cm above the floor. The surface should be strong enough to safety bear the weight of the oven.



1. When you install your oven, make sure there is adequate ventilation for your oven by leaving at least 10 cm (4 inches) of space behind and, on the sides of the oven and 20 cm (8 inches) of space above.
2. Remove all packing materials inside the oven.
3. Install the roller ring and turntable. Check that the turntable rotates freely. (Turntable type model only)
4. This microwave oven has to be positioned so that plug is accessible.

MG28F303EAW_EF_DE68-04179L-00_EN.indd 6 2014-04-11 8:23:12

- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
  For your personal safety, plug the cable into a proper AC earthed socket.
- Do not install the microwave oven in hot or damp surroundings like next to a traditional oven or radiator. The power supply specifications of the oven must be respected and any extension cable used must be of the same standard as the power cable supplied with the oven. Wipe the interior and the door seal with a damp cloth before using your microwave oven for the first time.

CLEANING YOUR MICROWAVE OVEN

The following parts of your microwave oven should be cleaned regularly to prevent grease and food particles from building up:

- Inside and outside surfaces
- Door and door seals
- Turntable and Roller rings (Turntable type model only)

- **ALWAYS** ensure that the door seals are clean and the door closes properly.
- Failure to maintain the oven in a clean condition could lead to deterioration of the surface that could adversely affect the life of the appliance and possibly result in a hazardous situation.

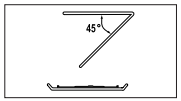
1. Clean the outside surfaces with a soft cloth and warm, soapy water. Rinse and dry.
2. Remove any splashes or stains on the inside surfaces of oven with a soapy cloth. Rinse and dry.
3. To loosen hardened food particles and remove smells, place a cup of diluted lemon juice in the oven and heat for ten minutes at maximum power.
4. Wash the dishwasher-safe plate whenever necessary.

- **DO NOT** spill water in the vents. **NEVER** use any abrasive products or chemical solvents. Take particular care when cleaning the door seals to ensure that no particles:
  - Accumulate
  - Prevent the door from closing correctly

MG28F303EAW_EF_DE68-04179L-00_EN.indd 7 2014-04-11 8:23:13

- **Clean** the microwave oven cavity right after each use with a mild detergent solution, but let the microwave oven cool down before cleaning in order to avoid injury.

When cleaning the upper part inside the cavity, it will be convenient to turn heater downward by 45° and clean it. (Swing heater model only)



STORING AND REPAIRING YOUR MICROWAVE OVEN

A few simple precautions should be taken when storing or having your microwave oven serviced.
The oven must not be used if the door or door seals are damaged:

- Broken hinge
- Deteriorated seals
- Distorted or bent oven casing

Only a qualified microwave service technician should perform repair.

- **NEVER** remove the outer casing from the oven. If the oven is faulty and needs servicing or you are in doubt about its condition:
  - Unplug it from the wall socket
  - Contact the nearest after-sales service centre
- If you wish to store your oven away temporarily, choose a dry, dustfree place. **Reason :** Dust and damp may adversely affect the working parts in the oven.
- This microwave oven is not intended for commercial use.
- The Light bulb should not be replaced in person for safety reasons. Please contact nearest authorised Samsung customer care, to arrange for a qualified engineer to replace the bulb.

⚠ WARNING					
	Only qualified staff should be allowed to modify or repair the appliance.	✓	✓	✓	✓
	Do not heat liquids and other food in sealed containers for microwave function.	✓	✓	✓	✓
	For your safety, do not use high-pressure water cleaners or steam jet cleaners.	✓	✓	✓	✓
	Do not install this appliance; near heater, inflammable material; in a humid, oily or dusty location, in a location exposed to direct sunlight and water or where gas may leak; on un level ground.	✓	✓	✓	✓
	This appliance must be properly grounded in accordance with local and national codes.	✓	✓	✓	✓

MG28F303EAW_EF_DE68-04179L-00_EN.indd 8 2014-04-11 8:23:18

	Remove all foreign substances such as dust or water from the power plug terminals and contact points using a dry cloth on a regular basis.	✓	✓	✓	✓
	Do not pull or excessively bend or place heavy objecton the power cord.	✓	✓	✓	✓
	In the event of a gas leak (such as propane gas, LP gas, etc.), ventilate immediately without touching the power plug.	✓	✓	✓	✓
	Do not touch the power plug with wet hands.	✓	✓	✓	✓
	Do not turn the appliance off by unplugging the power plug while an operation is in progress.	✓	✓	✓	✓
	Do not insert fingers or foreign substances, If any foreign substance such as water has entered the appliance, unplug the power plug and contact your nearest service centre.	✓	✓	✓	✓
	Do not apply excessive pressure or impact to the appliance.	✓	✓	✓	✓
	Do not place the oven over a fragile object such as a sink or glass object.	✓	✓		
	Do not use benzene, thinner, alcohol, steam cleaner or high pressure cleaner to clean the appliance.	✓	✓	✓	✓
	Ensure that the power voltage, frequency and current are the same as those of the product specifications.	✓	✓		✓
	Plug the power plug into the wall socket firmly. Do not use a multiple plug adapter, an extension cord or an electric transformer.	✓	✓	✓	
	Do not hook the power cord on a metal object, insert the power cord between the objects or behind the oven.	✓	✓	✓	

	Do not use a damaged power plug, damaged power cord or loose wall socket. When the power plug or power cord is damaged, contact your nearest service centre.	✓	✓	✓	✓
	Do not pour or directly spray water onto the oven.	✓	✓		
	Do not place objects on the oven, inside or on the door of the oven.	✓	✓	✓	
	Do not spray volatile material such as insecticide onto the surface of the oven.	✓	✓		
	Do not store flammable materials in the oven. Take special care when heating dishes or drinks that contain alcohol as alcohol vapours may contact a hot part of the oven.	✓		✓	✓
	Keep children away from the door when opening or closing it as they may bump themselves on the door or catch their fingers in the door.	✓	✓	✓	✓
	WARNING: Microwave heating of beverages can result in delayed eruptive boiling, therefore care must be taken when handling the container; To prevent this situation ALWAYS allow a standing time of at least 20 seconds after the oven has been switched off so that the temperature can equalize. Stir during heating, if necessary, and ALWAYS stir after heating. In the event of scalding, follow these FIRST AID instructions: • Immerse the scalded area in cold water for at least 10 minutes. • Cover with a clean, dry dressing. • Do not apply any creams, oils or lotions.	✓	✓	✓	✓
	Do not put the tray or rack in water shortly after cooking because it may cause breakage or damage of the tray or rack.				✓

MG28F303EAW_EF_DE68-04179L-00_EN.indd 9 2014-04-11 8:23:30

	Do not operate the microwave oven for deep fat frying because the oil temperature cannot be controlled. This could result in a sudden boil over of the hot liquid.	✓			✓

⚠ CAUTION				
	Only use utensils that are suitable for use in microwave ovens; DO NOT use any metallic containers, Dinnerware with gold or silver trimmings, Skewers, forks, etc. Remove wire twist ties from paper or plastic bags. Reason: Electric arcing or sparking may occur and may damage the oven.	✓		✓	✓
	Do not use your microwave oven to dry papers or clothes.	✓		✓	✓
	Use shorter times for smaller amounts of food to prevent overheating and burning food.	✓		✓	✓
	Do not immerse the power cable or power plug in water and keep the power cable away from heat.	✓	✓		
	Eggs in their shell and whole hard-boiled eggs should not be heated in microwave ovens since they may explode, even after microwave heating has ended; Also do not heat airtight or vacuum-sealed bottles, jars, containers, nuts inshells, tomatoes etc.			✓	✓
	Do not cover the ventilation slots with cloth or paper. They may catch fire as hot air escapes from the oven. The oven may also overheat and switch itself off automatically, and will remain off until it cools sufficiently.	✓		✓	
	Always use oven mitts when removing a dish from the oven to avoid unintentional burns.			✓	
	Stir liquids halfway during heating or after heating ends and allow the liquid stand at least 20 seconds after heating to prevent eruptive boiling.			✓	
	Stand at arms length from the oven when opening the door to avoid getting scalded by escaping hot air or steam.			✓	
	Do not operate the microwave oven when it is empty. The microwave oven will automatically shut down for 30 minutes for safety purposes. We recommend placing a glass of water inside the oven at all times to absorb microwave energy in case the microwave oven is started accidentally.	✓			✓
	Install the oven in compliance with the clearances stated in this manual. (See installing your microwave oven.)	✓		✓	
	Take care when connecting other electrical appliances to sockets near the oven.	✓	✓	✓	

PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY.(MICROWAVE FUNCTION ONLY)

Failure to observe the following safety precautions may result in harmful exposure to microwave energy.

(a) Under no circumstances should any attempt be made to operate the oven with the door open or to tamper with the safety interlocks (door latches) or to insert anything into the safety interlock holes.

(b) Do NOT place any object between the oven door and front face or allow food or cleaner residues to accumulate on sealing surfaces. Ensure that the door and door sealing surfaces are kept clean by wiping after use first with a damp cloth and then with a soft dry cloth.

(c) Do NOT operate the oven if it is damaged until it has been repaired by a qualified microwave service technician trained by the manufacturer. It is particularly important that the oven door closes properly and that there is no damage to the:
(1) door (bent)
(2) door hinges (broken or loose)
(3) door seals and sealing surfaces

(d) The oven should not be adjusted or repaired by anyone other than a properly qualified microwave service technician trained by the manufacturer.

Samsung will charge a repair fee for replacing an accessory or repairing a cosmetic defect if the damage to the unit and/or damage to or loss of the accessory was caused by the customer. Items this stipulation covers include:

MG28F303EAW_EF_DE68-04179L-00_EN.indd 10 2014-04-11 8:23:43

(a) A Dented, Scratched, or Broken Door, Handle, Out-Panel, or Control Panel.

(b) A Broken or missing Tray, Guide Roller, Coupler, or Wire Rack.

- Use this appliance only for its intended purpose as described in this instruction manual. Warnings and Important Safety Instructions in this manual do not cover all possible conditions and situations that may occur. It is your responsibility to use common sense, caution, and care when installing, maintaining, and operating your appliance.
- Because these following operating instructions cover various models, the characteristics of your microwave oven may differ slightly from those described in this manual and not all warning signs may be applicable. If you have any questions or concerns, contact your nearest service centre or find help and information online at www.samsung.com.
- This microwave oven is supposed for heating food. It is intended for domestic home-use only. Do not heat any type of textiles or cushions filled with grains, which could cause burns and fire. The manufacturer cannot be held liable for damage caused by improper or incorrect use of the appliance.
- Failure to maintain the oven in a clean condition could lead to deterioration of the surface that could adversely affect the life of the appliance and possible result in a hazardous situation.

CORRECT DISPOSAL OF THIS PRODUCT (WASTE ELECTRICAL & ELECTRONIC EQUIPMENT)

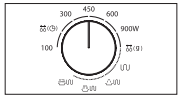
(Applicable in countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.
Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.
Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

quick look-up guide

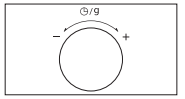
If you want to cook some food.

1. Place the food in the oven.
   Select the power level by rotating the **COOKING POWER CONTROL** knob.



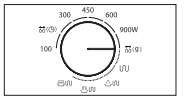
2. Select the cooking time by rotating the **TIME/WEIGHT** (◷/g) dial.

   Result: Cooking starts after about two seconds.



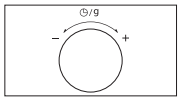
If you want to auto defrost some food.

1. Turn the **COOKING POWER CONTROL** knob to the **Auto Defrost** (❄❄(g)) symbol



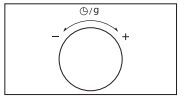
2. Turn the **TIME/WEIGHT** (◷/g) dial to select the appropriate weight.

   Result: Cooking starts after about two seconds.



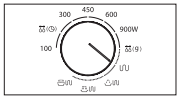
If you want to adjust the cooking time.

Leave the food in the oven.
Turn the **TIME/WEIGHT** (◷/g) dial to the desired time.



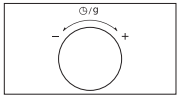
If you want to grill some food.

1. Turn the **COOKING POWER CONTROL** knob to the **Grill** (⋂⋂) symbol.



2. Turn the **TIME/WEIGHT** (◷/g) dial to select the appropriate time.

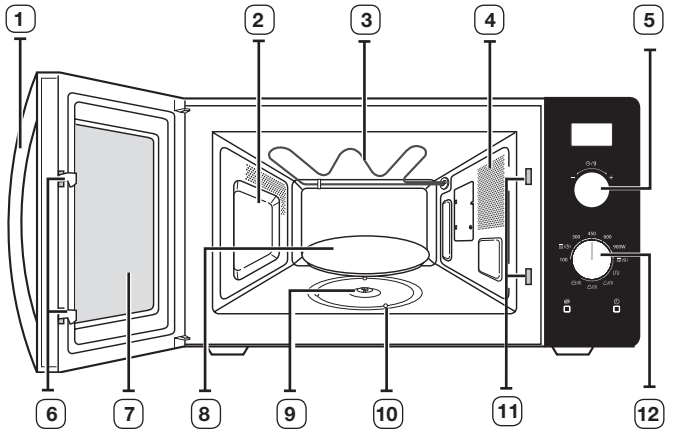
   Result: Cooking starts after about two seconds.



MG28F303EAW_EF_DE68-04179L-00_EN.indd 11 2014-04-11 8:23:48

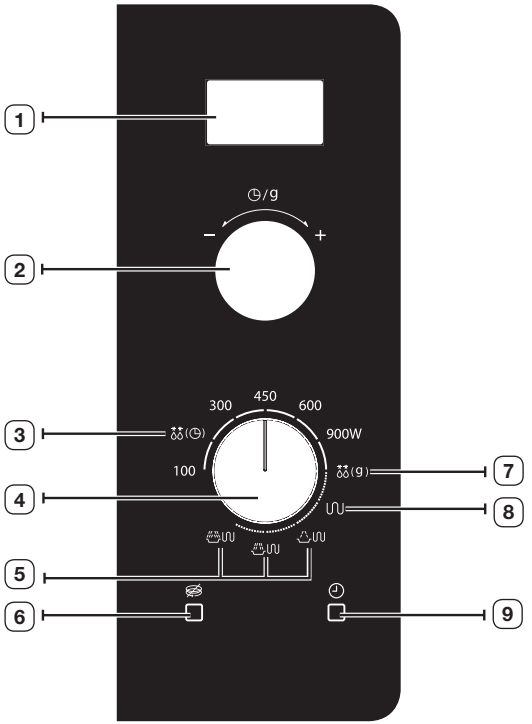
oven features

OVEN



1. DOOR HANDLE
2. VENTILATION HOLES
3. GRILL
4. LIGHT
5. TIMER KNOB
6. DOOR LATCHES
7. DOOR
8. TURNTABLE
9. COUPLER
10. ROLLER RING
11. SAFETY INTERLOCK HOLES
12. VARIABLE COOKING POWER CONTROL KNOB

CONTROL PANEL



1. DISPLAY
2. TIME / WEIGHT DIAL
3. MANUAL DEFROST
4. VARIABLE COOKING POWER CONTROL KNOB
5. COMBI (MICROWAVE + GRILL)
6. TURNTABLE ON/OFF BUTTON
7. AUTO DEFROST
8. GRILL
9. CLOCK SETTING BUTTON

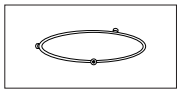
MG28F303EAW_EF_DE68-04179L-00_EN.indd 12 2014-04-11 8:23:50

ACCESSORIES

Depending on the model that you have purchased, you are supplied with several accessories that can be used in a variety of ways.

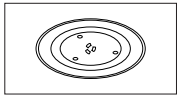
1. **Roller ring**, to be placed in the centre of the oven.

   Purpose : The roller ring supports the turntable.



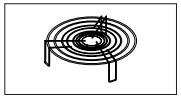
2. **Turntable**, to be placed on the roller ring with the centre fitting to the coupler.

   Purpose : The turntable serves as the main cooking surface; it can be easily removed for cleaning.



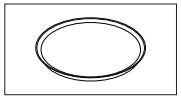
3. **Grill rack**, to be placed on the turntable.

   Purpose : The metal rack can be used in grill and combination cooking.



4. **Crusty plate ,** see page 19~20.
   (MG28F303EC*, MG28F303EJ*, MG28F304EC*, MG28F304EJ* models only)

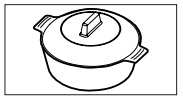
   Purpose: The crusty plate is used to brown food better in the microwave or grill combination cooking modes. It helps keep pastry and pizza dough crisp.



DO NOT operate the microwave oven without the roller ring and turntable.

5. **Steam cooker,** see page 17 to 18.
   (MG28F303EF*, MG28F303EJ*, MG28F304EF*, MG28F304EJ* models only)

   Purpose : The plastic steam cooker when using power steam function.



DO NOT operate the microwave oven without the roller ring and turntable.

DO NOT operate the **GRILL** (⎍) and **COMBI** (♨⎍) mode with Steam cooker.

Operation mode	MW (♨)	GRILL (⎍) / COMBI (♨⎍)
(Steam cooker)	O	X

MG28F303EAW_EF_DE68-04179L-00_EN.indd 13 2014-04-11 8:23:52

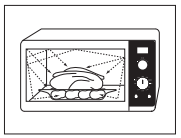
HOW A MICROWAVE OVEN WORKS

Microwaves are high-frequency electromagnetic waves; the energy released enables food to be cooked or reheated without the foods form or colour changing.

You can use your microwave oven to:

- Defrost (manual & auto)
- Cook
- Reheat

Cooking Principle



1. The microwaves generated by the magnetron are distributed uniformly as the food rotates on the turntable. The food is thus cooked evenly.
2. The microwaves are absorbed by the food up to a depth of about 1 inch (2.5 cm). Cooking then continues as the heat is dissipated within the food.
3. Cooking times vary according to the recipient used and the properties of the food:
   - Quantity and density
   - Water content
   - Initial temperature (refrigerated or not)

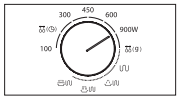
As the centre of the food is cooked by heat dissipation, cooking continues even when you have taken the food out of the oven. Standing times specified in recipes and in this booklet must therefore be respected to ensure:

- Even cooking of the food right to the centre
- The same temperature throughout the food

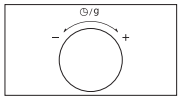
CHECKING THAT YOUR OVEN IS OPERATING CORRECTLY

The following simple procedure enables you to check that your oven is working correctly at all times.
Open the oven door by pulling the handle on the right side of the door.
Place a glass of water on the turntable. Then, close the door.

1. Set the power level to maximum by turning **COOKING POWER CONTROL** knob.



2. Set the time 4 to 5 minutes by turning the **TIME/ WEIGHT** (◷ / g) dial.



Result: The oven light comes on and the turntable starts rotating.

1) Cooking starts and when it has finished the oven beeps 4 times.
2) The end reminder signal will beep 3 times (once every minute).
3) The current time is displayed again.

The oven must be plugged into an appropriate wall socket. The turntable must be in position in the oven. If a power level other than the maximum is used, the water takes longer to boil.

MG28F303EAW_EF_DE68-04179L-00_EN.indd 14 2014-04-11 8:23:53

SETTING THE TIME

Your microwave oven has an inbuilt clock. When power is supplied, ":0", "88:88" or "12:00" is automatically displayed on the display.
Please set the current time. The time can be displayed in either the 24-hour or 12-hour notation. You must set the clock:

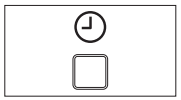
- When you first install your microwave oven
- After a power failure

Do not forget to reset the clock when you switch to and from summer or winter time.

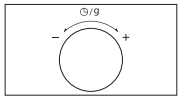
Auto energy saving function

If you do not select any function when appliance is in the middle of setting or operating with temporary stop condition, function is canceled and clock will be displayed after 25 minutes. Oven Lamp will be turned off after 5 minutes with door open condition.

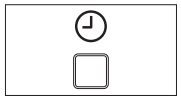
1. **To display the time in the..**
   24-hour notation
   12-hour notation
   Press the **Clock ( )** button once or twice.



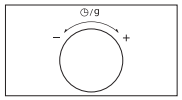
2. Turn the **TIME/WEIGHT** (/ g) dial to set hour.



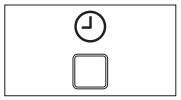
3. Press the **Clock ( )** button.



4. Turn the **TIME/WEIGHT** (/ g) dial to set minute.



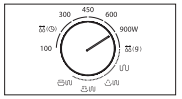
5. Press the **Clock ( )** button.



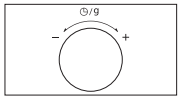
COOKING / REHEATING

The following procedure explains how to cook or reheat food.
Always check your cooking settings before leaving the oven unattended.
First, place the food in the centre of the turntable. Then, close the door.

1. Set the power level to maximum by turning **COOKING POWER CONTROL** knob.
   (MAXIMUM POWER : 900 W)



2. Set the time by turning **TIME/WEIGHT** (/ g) dial.



Result: The oven light comes on and the turntable starts rotating.
1) Cooking starts and when it has finished the oven beeps 4 times.
2) The end reminder signal will beep 3 times (once every minute).
3) The current time is displayed again..

Never switch the microwave oven on when it is empty.

You can change the power level during cooking by turning the **COOKING POWER CONTROL** knob.

MG28F303EAW_EF_DE68-04179L-00_EN.indd 15 2014-04-11 8:23:54

POWER LEVELS

You can choose any of the power levels listed below.

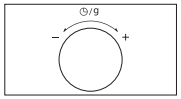
Power Level	Output	
	MICROWAVE	GRILL
HIGH	900 W	-
MEDIUM HIGH	600 W	-
MEDIUM	450 W	-
MEDIUM LOW	300 W	-
MANUAL DEFROST	180 W	-
AUTO DEFROST	180 W	-
LOW / KEEP WARM	100 W	-
GRILL	-	1500 W
COMBI I	300 W	1500 W
COMBI II	450 W	1500 W
COMBI III	600 W	1500 W

If you select higher power level, the cooking time must be decreased.

If you select lower power level, the cooking time must be increased.

ADJUSTING THE COOKING TIME

Adjust the remaining cooking time by rotating the **TIME/ WEIGHT** (◷ / g) dial.
During the cooking to increase or decrease the cooking time of you food, turn the dial right or left.

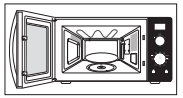


STOPPING THE COOKING

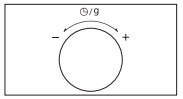
You can stop cooking at any time to check the food.

1. To stop temporarily;
   Open the door.

   Result: Cooking stops. To resume cooking, close the door.



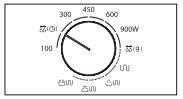
2. To stop completely;
   Turn the **TIME/WEIGHT** (◷ / g) dial to the left.
   "Current time" will be displayed.



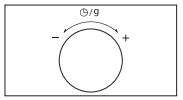
MANUAL DEFROSTING FOOD

The Manual Defrost feature enables you to defrost meat, poultry, fish. First, place the frozen food in the centre of the turntable and close the door.

1. Turn the **COOKING POWER CONTROL** knob to the **Manual Defrost** (❄ (◷)) symbol.



2. Turn the **TIME/WEIGHT** (◷ / g) dial to select the appropriate time.



   Result: The oven light comes on and the turntable starts rotating.
   1) Cooking starts and when it has finished the oven beeps 4 times.
   2) The end reminder signal will beep 3 times (once every minute).
   3) The current time is displayed again.

Use only recipients that are microwave-safe.

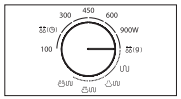
Select the Manual Defrosting function with a power level of 180 W if you want to defrost food manually. For further details on manual defrosting and defrosting time, refer to the page 27-28.

MG28F303EAW_EF_DE68-04179L-00_EN.indd 16 2014-04-11 8:23:57

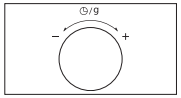
USING THE AUTO DEFROSTING FEATURE

The Auto Defrost feature enables you to defrost meat, poultry, fish.
First, place the frozen food in the centre of the turntable and close the door.

1. Turn the **COOKING POWER CONTROL** knob to the **Auto Defrost** (❄ (g)) symbol.



2. Turn the **TIME/WEIGHT** (◷ / g) dial to select the appropriate weight.



Result: The oven light comes on and the turntable starts rotating.

1) Cooking starts and when it has finished the oven beeps 4 times.
2) The end reminder signal will beep 3 times (once every minute).
3) The current time is displayed again.

Use only recipients that are microwave-safe.

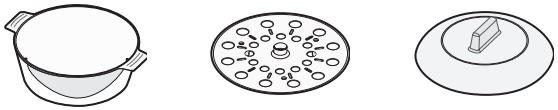
USING THE AUTO DEFROST PROGRAMMES

Remove all kinds of packaging material before defrosting.
Place the frozen foods on a turntable.
Turn the food over when the oven beeps.
Keep the corresponding standing time after Auto Defrosting has finished.

Food	Portion	Standing time	Recommendation
Meat	200-1500 g	20-60 min.	Shield the edges with aluminium foil. Turn the food over when the oven beeps.
Poultry	200-1500 g	20-60 min.	
Fish	200-1500 g	20-60 min.	

POWER STEAM COOKING GUIDE (MG28F303EF*, MG28F303EJ*, MG28F304EF*, MG28F304EJ* MODELS ONLY)

The Power Steamer is based on the principle of steam cooking, and is designed for fast, healthy cooking in your Samsung Microwave oven.
This accessory is ideal for cooking rice, pasta, vegetables, etc. in record time, while preserving their nutritional values.
The Microwave Power steamer set is made up of 3 items:



Bowl Insert tray Lid

All parts withstand temperatures from -20 °C to 140 °C.
Suitable for freezer storage. Can also be used separately or together.

CONDITIONS of USE:

Do not use:

- to cook foods with a high sugar or fat content,
- with the grill or rotating heat function or on a hob.

Wash all parts well in soapy water before first use.

To find out cooking times, please refer to the instructions in the table on next page.

MAINTENANCE:

Your steamer can be washed in a dishwasher.

When washing by hand, use hot water and washing-up liquid. Do not use abrasive pads.

Some foods (such as tomato) may discolour the plastic. This is normal and not a manufacturing fault.

DEFROSTING:

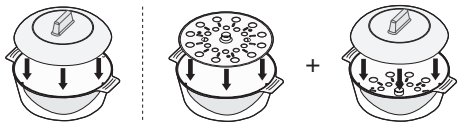
Place the frozen food in the steam bowl without the lid. The liquid will remain in the bottom of the pot and will not harm the food.

MG28F303EAW_EF_DE68-04179L-00_EN.indd 17 2014-04-11 8:23:57

COOKING:

Food	Portion	Power levels	Cooking time (min.)	Standing time (min.)	Handling
Artichokes	300 g (1-2 pcs)	900 W	5-6	1-2	Bowl with insert tray + Lid
	Instructions Rinse and clean artichokes. Put insert tray into bowl. Set artichokes on tray. Add one tablespoon lemon juice. Cover with lid.				
Fresh vegetables	300 g	900 W	4-5	1-2	Bowl with insert tray + Lid
	Instructions Weigh the vegetables (e.g. broccoli, cauliflower, carrots, pepper) after washing, cleaning and cutting into similar size. Put tray into bowl. Distribute vegetables on insert tray. Add 2 tablespoons water. Cover with lid.				
Frozen vegetables	300 g	600 W	7-8	2-3	Bowl with insert tray + Lid
	Instructions Put the frozen vegetables into the steam bowl. Put insert tray into bowl. Add 1 tablespoon water. Cover with lid. Stir well after cooking and standing.				
Rice	250 g	900 W	15-18	5-10	Bowl + Lid
	Instructions Put rice into the steam bowl. Add 500 ml cold water. Cover with lid. After cooking let stand white rice 5 minutes, brown rice 10 minutes.				
Jacket potatoes	500 g	900 W	7-8	2-3	Bowl + Lid
	Instructions Weigh and rinse the potatoes and put them into steam bowl. Add 3 tablespoons water. Cover with lid.				
Stew (chilled)	400 g	600 W	5-6	1-2	Bowl + Lid
	Instructions Put stew into the steam bowl. Cover with lid. Stir well before standing.				
Soup (chilled)	400 g	900 W	3-4	1-2	Bowl + Lid
	Instructions Pour into steam bowl. Cover with lid. Stir well before standing.				
Frozen soup	400 g	900 W	8-10	2-3	Bowl + Lid
	Instructions Put frozen soup into steam bowl. Cover with lid. Stir well before standing.				
Frozen yeast dumpling with jam filling	150 g	600 W	1-2	2-3	Bowl + Lid
	Instructions Moist the top of filled dumplings with cold water. Put 1-2 frozen dumplings side by side into the steam bowl. Cover with lid.				
Fruit compote	250 g	900 W	3-4	2-3	Bowl + Lid
	Instructions Weigh the fresh fruits (e.g. apples, pears, plums, apricots, mangoes or pineapple) after peeling, washing and cutting into similar sizes or cubes. Put into steam bowl. Add 1-2 tablespoons water and 1-2 tbsp. sugar. Cover with lid.				

Handling of power steam cooker



Bowl + Lid Bowl with insert tray + Lid

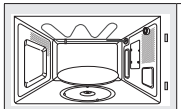
PRECAUTIONS:

- Take special care when opening the lid of your steamer, because the steam escaping may be very hot.
- Use oven gloves when handling after cooking.

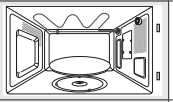
MG28F303EAW_EF_DE68-04179L-00_EN.indd 18 2014-04-11 8:23:59

USING THE CRUSTY PLATE (MG28F303EC*, MG28F303EJ*, MG28F304EC*, MG28F304EJ* MODELS ONLY)

This crusty plate allows you to brown food not only on the top with the grill, but also the bottom of the food turns crispy and brown due to the high temperature of the crusty plate. Several items which you can prepare on the crusty plate can be found in the chart (see next page). The crusty plate can also be used for bacon, eggs, sausages, etc.



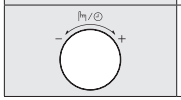
1. Place the crusty plate directly on the turntable and preheat it with highest Microwave-Grill-Combination [600 W + Grill] by following the times and instructions in the chart.



2. Brush the plate with oil if you are cooking food, such as bacon and eggs, in order to brown the food nicely.

3. Place the food on the crusty plate.

4. Place the crusty plate on the metal rack (or turntable) in the microwave.



5. Select the appropriate cooking time and power. (Refer to the table on the side)

- Always use oven gloves to take out the crusty plate, as will become very hot.
- Please note that the crusty plate has a teflon layer which is not scratch-resistant. Do not use any sharp objects like a knife to cut on the crusty plate.
- Do not place any objects on the crusty plate that are not heat-resistant.
- Never place the crusty plate in the oven without turntable.
- Clean the crusty plate with warm water and detergent and rinse off with clean water.
- Do not use a scrubbing brush or a hard sponge otherwise the top layer will be damaged.
- Please note that the crust plate is not dish washer-safe.

We recommend to preheat the crusty plate directly on the turntable.
Preheat crusty plate with 600 W + Grill function for 3-4 minutes.
Follow the times and instructions in the table.

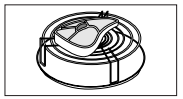
Food	Serving Size	Power	Cooking time (min.)
Bacon	4 slices (80 g)	600 W + Grill	3-3½
	Instructions Preheat crust plate for 3 minutes. Put slices side by side on crust plate. Put crust plate on rack. Stand for 3 minutes.		
Grilled Tomatoes	200 g (2 pcs)	450 W + Grill	2½-3
	Instructions Preheat crust plate for 3 minutes. Cut tomatoes in halves. Put some cheese on top. Arrange in a circle on crust plate. Put crust plate on rack. Stand for 3 minutes.		
Burger (Frozen)	2 pieces (125 g)	600 W + Grill	6-6½
	Instructions Preheat crust plate for 3 minutes. Put frozen burger on the crust plate. Put crust plate on rack. Turn over after 3-4 min. Stand for 3 minutes.		
Baguettes (Frozen)	200-250 g (2 pcs)	450 W + Grill	6-7
	Instructions Preheat crust plate for 3 minutes. Put baguettes with topping (e.g. tomato-cheese) side by side on the plate. Put crust plate on rack. Stand for 3 minutes.		
Pizza (Frozen)	300-350 g	450 W+Grill	7½-8½
	Instructions Preheat the crust plate for 3 minutes. Put the frozen pizza on the crust plate. Put crust plate on the turntable. Stand for 1-2 minutes.		

(continued)

MG28F303EAW_EF_DE68-04179L-00_EN.indd 19 2014-04-11 8:24:00

Food	Serving Size	Power	Cooking time (min.)
Mini Pizza-Snack (Frozen)	9 X 30 g (270 g)	300 W + Grill	9-10
	Instructions Preheat crust plate for 3 minutes. Distribute pizza snacks evenly on crust plate. Put the plate on the Turntable. Stand for 3 minutes.		
Pizza (Chilled)	300-350 g	450 W + Grill	5½-6½
	Instructions Preheat crust plate for 5 minutes. Put the chilled pizza on the plate. Put crust plate on the Turntable. Stand for 3 minutes.		
Fish Fingers (Frozen)	150 g (5 pcs) 300 g (10 pcs)	600 W + Grill	6-7 8-9
	Instructions Preheat crust plate for 4 minutes. Brush plate with 1 tbsp oil. Put fish fingers in a circle on the plate. Turn over after 3 min (5 pcs) or after 5 min. (10 pcs). Stand for 3 minutes.		
Chicken Nuggets (Frozen)	125 g 250 g	600 W + Grill	4-5 6-7
	Instructions Preheat crust plate for 4 minutes. Brush plate with 1 tbsp oil. Put chicken nuggets on the plate. Put crust plate on rack. Turn over after 2 min (125 g) or 4 min. (250 g). Stand for 3 minutes.		
Baked Potatoes	250 g 500 g	600 W + Grill	4-5 7-8
	Instructions Preheat crust plate for 3 minutes. Cut potatoes in halves. Put them on the crust plate with the cut-side to the bottom. Arrange in a circle. Put the plate on the rack. Stand for 3 minutes.		

CHOOSING THE ACCESSORIES



Use microwave-safe recipients; do not use plastic containers, dishes, paper cups, towels, etc.

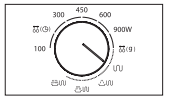
If you wish to select the combined cooking mode (grill and microwave), use only dishes that are microwave-safe and oven-proof.

For further details on suitable cookware and utensils, refer to the cookware guide on page 22.

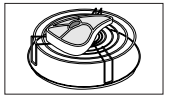
GRILLING

The grill enables you to heat and brown food quickly, without using microwaves. To this aim, a grill rack is supplied with your microwave oven.

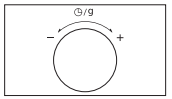
1. Preheat the grill to the required temperature, by turning the cooking power control knob to **Grill** (⏦) symbol and turning the **TIMEWEIGHT** (◷ / g) knob to the appropriate.



2. Open the door. Place the food on the rack and the rack on the turntable. Close the door.



3. Set the time by turning the **TIMEWEIGHT** (◷ / g) dial.



Result : The oven light comes on and the turntable starts rotating.

1) Cooking starts and when it has finished the oven beeps 4 times.
2) The end reminder signal will beep 3 times (once every minute).
3) The current time is displayed again.

Do not worry if the heater turns off and on while grilling. This system is designed to prevent overheating of the oven.

MG28F303EAW_EF_DE68-04179L-00_EN.indd 20 2014-04-11 8:24:01

Always use oven gloves when touching the dishes in the oven, as they will be very hot.
Check that the heating element is in the horizontal position.

DO NOT operate the GRILL (⎍) / COMBI (⎍) mode with power steam cooker.

Operation mode	MW (⎍)	GRILL (⎍) / COMBI (⎍)
(Steam cooker)	O	X

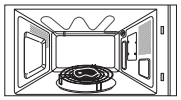
COMBINING MICROWAVES AND THE GRILL

You can also combine microwave cooking with the grill, to cook quickly and brown at the same time.

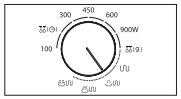
ALWAYS use microwave-safe and oven-proof cookware. Glass or ceramic dishes are ideal as they allow the microwaves to penetrate the food evenly.

ALWAYS use oven gloves when touching the recipients in the oven, as they will be very hot.

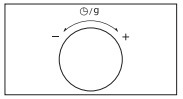
1. Open the oven door. Place the food on the rack and the rack on the turntable. Close the door.



2. Turn the **COOKING POWER CONTROL** knob to the appropriate **Power Level** (⎍, ⎍, ⎍).



3. Set the time by turning **TIMEDEFROST** (◷ / g) dial.



Result: The oven light comes on and the turntable starts rotating.
1) Cooking starts and when it has finished the oven beeps 4 times.
2) The end reminder signal will beep 3 times (once every minute).
3) The current time is displayed again..

The maximum microwave power for the combined microwave and grill mode is 600 W.

DO NOT operate the **GRILL** (⎍) / **COMBI** (⎍) mode with power steam cooker.

Operation mode	MW (⎍)	GRILL (⎍) / COMBI (⎍)
	O	X

USING THE TURNTABLE ON/OFF FEATURES

The **Turntable On/Off** button enables you to use large dishes which fill the whole oven by stopping the turntable from rotating (only manual cooking mode).

The results will be less satisfactory in this case as the cooking is less even. We recommend that you turn the dish by hand halfway through the cooking process.

WARNING Never operate the turntable without food in the oven.
Reason: This may cause fire or damage to the unit.

	1. Press the **Turntable On/Off** button. **Result:** The turntable will not rotate.
	2. To switch the turntable rotating back on, press the **Turntable On/Off** button again. **Result:** The turntable will rotate.

This **Turntable On/Off** button is available only during cooking.

MG28F303EAW_EF_DE68-04179L-00_EN.indd 21 2014-04-11 8:24:02

cookware guide

To cook food in the microwave oven, the microwaves must be able to penetrate the food, without being reflected or absorbed by the dish used. Care must therefore be taken when choosing the cookware. If the cookware is marked microwave-safe, you do not need to worry.
The following table lists various types of cookware and indicates whether and how they should be used in a microwave oven.

Cookware	Microwave-safe	Comments
Aluminum foil	✓✗	Can be used in small quantities to protect areas against overcooking. Arcing can occur if the foil is too close to the oven wall or if too much foil is used.
Crust plate	✓	Do not preheat for more than 8 minutes.
China and earthenware	✓	Porcelain, pottery, glazed earthenware and bone china are usually suitable, unless decorated with a metal trim.
Disposable polyester cardboard dishes	✓	Some frozen foods are packaged in these dishes.
Fast-food packaging		
• Polystyrene cups containers	✓	Can be used to warm food. Overheating may cause the polystyrene to melt.
• Paper bags or newspaper	✗	May catch fire.
• Recycled paper or metal trims	✗	May cause arcing.
Glassware		
• Oven-to-tableware	✓	Can be used, unless decorated with a metal trim.
• Fine glassware	✓	Can be used to warm foods or liquids. Delicate glass may break or crack if heated suddenly.
• Glass jars	✓	Must remove the lid. Suitable for warming only.
Metal		
• Dishes	✗	May cause arcing or fire.
• Freezer bag twist ties	✗	
Paper		
• Plates, cups, napkins and kitchen paper	✓	For short cooking times and warming. Also to absorb excess moisture.
• Recycled paper	✗	May cause arcing.
Plastic		
• Containers	✓	Particularly if heat-resistant thermoplastic. Some other plastics may warp or discolour at high temperatures. Do not use Melamine plastic.
• Cling film	✓	Can be used to retain moisture. Should not touch the food. Take care when removing the film as hot steam will escape.
• Freezer bags	✓✗	Only if boilable or oven-proof. Should not be airtight. Prick with a fork, if necessary.
Wax or grease-proof paper	✓	Can be used to retain moisture and prevent spattering.

✓ : Recommended ✓✗ : Use caution ✗ : Unsafe

MG28F303EAW_EF_DE68-04179L-00_EN.indd 22 2014-04-11 8:24:03

cooking guide

MICROWAVES

Microwave energy actually penetrates food, attracted and absorbed by its water, fat and sugar content.
The microwaves cause the molecules in the food to move rapidly. The rapid movement of these molecules creates friction and the resulting heat cooks the food.

COOKING

Cookware for microwave cooking:
Cookware must allow microwave energy to pass through it for maximum efficiency. Microwaves are reflected by metal, such as stainless steel, aluminium and copper, but they can penetrate through ceramic, glass, porcelain and plastic as well as paper and wood. So food must never be cooked in metal containers.

Food suitable for microwave cooking:
Many kinds of food are suitable for microwave cooking, including fresh or frozen vegetables, fruit, pasta, rice, grains, beans, fish, and meat. Sauces, custard, soups, steamed puddings, preserves, and chutneys can also be cooked in a microwave oven. Generally speaking, microwave cooking is ideal for any food that would normally be prepared on a hob. Melting butter or chocolate, for example (see the chapter with tips, techniques and hints).

Covering during cooking
To cover the food during cooking is very important, as the evaporated water rises as steam and contributes to cooking process. Food can be covered in different ways: e.g. with a ceramic plate, plastic cover or microwave suitable cling film.

Standing times
After cooking is over food the standing time is important to allow the temperature to even out within the food.

Cooking Guide for frozen vegetables

Use a suitable glass pyrex bowl with lid. Cook covered for the minimum time – see table. Continue cooking to get the result you prefer.
Stir twice during cooking and once after cooking. Add salt, herbs or butter after cooking. Cover during standing time.

Food	Serving Size	Power	Time (min.)
Spinach	150 g	600 W	5-6
	Instructions Add 15 ml (1 tbsp) cold water. Stand for 2-3 minutes.		
Broccoli	300 g	600 W	8-9
	Instructions Add 30 ml (2 tbsp) cold water. Stand for 2-3 minutes.		
Peas	300 g	600 W	7-8
	Instructions Add 15 ml (1 tbsp) cold water. Stand for 2-3 minutes.		
Green Beans	300 g	600 W	7½-8½
	Instructions Add 30 ml (2 tbsp) cold water. Stand for 2-3 minutes.		
Mixed Vegetables (Carrots/Peas/ Corn)	300 g	600 W	7-8
	Instructions Add 15 ml (1 tbsp) cold water. Stand for 2-3 minutes.		
Mixed Vegetables (Chinese Style)	300 g	600 W	7½-8½
	Instructions Add 15 ml (1 tbsp) cold water. Stand for 2-3 minutes.		

MG28F303EAW_EF_DE68-04179L-00_EN.indd 23 2014-04-11 8:24:03

Cooking Guide for fresh vegetables

Use a suitable glass pyrex bowl with lid. Add 30-45 ml cold water (2-3 tbsp) for every 250 g unless another water quantity is recommended – see table. Cook covered for the minimum time – see table. Continue cooking to get the result you prefer. Stir once during and once after cooking. Add salt, herbs or butter after cooking. Cover during a standing time of 3 minutes.

Hint: Cut the fresh vegetables into even sized pieces. The smaller they are cut, the quicker they will cook.

Food	Serving Size	Power	Time (min.)
Broccoli	250 g 500 g	900 W	4½-5 7-8
	Instructions Prepare even sized florets. Arrange the stems to the centre. Stand for 3 minutes.		
Brussels Sprouts	250 g	900 W	6-6½
	Instructions Add 60-75 ml (4-5 tbsp) water. Stand for 3 minutes.		
Carrots	250 g	900 W	4½-5
	Instructions Cut carrots into even sized slices. Stand for 3 minutes.		
Cauliflower	250 g 500 g	900 W	5-5½ 7½-8½
	Instructions Prepare even sized florets. Cut big florets into halves. Arrange stems to the centre. Stand for 3 minutes.		
Courgettes	250 g	900 W	4-4½
	Instructions Cut courgettes into slices. Add 30 ml (2 tbsp) water or a knob of butter. Cook until just tender. Stand for 3 minutes.		
Egg Plants	250 g	900 W	3½-4
	Instructions Cut egg plants into small slices and sprinkle with 1 tbsp lemon juice. Stand for 3 minutes.		
Leeks	250 g	900 W	4-4½
	Instructions Cut leeks into thick slices. Stand for 3 minutes.		
Mushrooms	125 g 250 g	900 W	1½-2 2½-3
	Instructions Prepare small whole or sliced mushrooms. Do not add any water. Sprinkle with lemon juice. Spice with salt and pepper. Drain before serving. Stand for 3 minutes.		
Onions	250 g	900 W	5-5½
	Instructions Cut onions into slices or halves. Add only 15 ml (1 tbsp) water. Stand for 3 minutes.		
Pepper	250 g	900 W	4½-5
	Instructions Cut pepper into small slices. Stand for 3 minutes.		
Potatoes	250 g 500 g	900 W	4-5 7-8
	Instructions Weigh the peeled potatoes and cut them into similar sized halves or quarters. Stand for 3 minutes.		
Turnip Cabbage	250 g	900 W	5½-6
	Instructions Cut turnip cabbage into small cubes. Stand for 3 minutes.		

MG28F303EAW_EF_DE68-04179L-00_EN.indd 24 2014-04-11 8:24:03

Cooking Guide for rice and pasta

Rice: Use a large glass pyrex bowl with lid – rice doubles in volume during cooking. Cook covered.
After the cooking time is over, stir before standing time and salt or add herbs and butter.
Remark: the rice may not have absorbed all water after the cooking time is finished.

Pasta: Use a large glass pyrex bowl. Add boiling water, a pinch of salt and stir well. Cook uncovered.
Stir occasionally during and after cooking. Cover during standing time and drain thoroughly afterwards.

Food	Serving Size	Power	Time (min.)
White Rice (Parboiled)	250 g 375 g	900 W	15-16 17½-18½
	Instructions Add 500 ml cold water.(250 g), Add 750 ml cold water.(375 g) Stand for 5 minutes.		
Brown Rice (Parboiled)	250 g 375 g	900 W	20-21 22-23
	Instructions Add 500 ml cold water.(250 g), Add 750 ml cold water.(375 g) Stand for 5 minutes.		
Mixed Rice (Rice + Wild Rice)	250 g	900 W	16-17
	Instructions Add 500 ml cold water. Stand for 5 minutes.		
Mixed Corn (Rice + Grain)	250 g	900 W	17-18
	Instructions Add 400 ml cold water. Stand for 5 minutes.		
Pasta	250 g	900 W	10-11
	Instructions Add 1000 ml hot water. Stand for 5 minutes.		

REHEATING

Your microwave oven will reheat food in a fraction of the time that conventional ovens hobs normally take.
Use the power levels and reheating times in the following chart as a guide. The times in the chart consider liquids with a room temperature of about +18 to +20 °C or a chilled food with a temperature of about +5 to +7 °C.

Arranging and covering
Avoid reheating large items such as joint of meat – they tend to overcook and dry out before the centre is piping hot. Reheating small pieces will be more successful.

Power levels and stirring
Some foods can be reheated using 900 W power while others should be reheated using 600 W, 450 W or even 300 W.
Check the tables for guidance. In general, it is better to reheat food using a lower power level, if the food is delicate, in large quantities, or if it is likely to heat up very quickly (mince pies, for example).
Stir well or turn food over during reheating for best results. When possible, stir again before serving.
Take particular care when heating liquids and baby foods. To prevent eruptive boiling of liquids and possible scalding , stir before, during and after heating. Keep them in the microwave oven during standing time. We recommend putting a plastic spoon or glass stick into the liquids. Avoid overheating (and therefore spoiling) the food.
It is preferable to underestimate cooking time and add extra heating time, if necessary.

Heating and standing times
When reheating food for the first time, it is helpful to make a note of the time taken – for future reference.
Always make sure that the reheated food is piping hot throughout.
Allow food to stand for a short time after reheating - to let the temperature even out.
The recommended standing time after reheating is 2-4 minutes, unless another time is recommended in the chart.
Take particular care when heating liquids and baby food. See also the chapter with the safety precautions.

MG28F303EAW_EF_DE68-04179L-00_EN.indd 25 2014-04-11 8:24:03

REHEATING LIQUIDS

Always allow a standing time of at least 20 seconds after the oven has been switched off to allow the temperature to even out. Stir during heating, if necessary, and ALWAYS stir after heating. To prevent eruptive boiling and possible scalding, you should put a spoon or glass stick into the beverages and stir before, during and after heating.

REHEATING BABY FOOD

BABY FOOD:

Empty into a deep ceramic plate. Cover with plastic lid. Stir well after reheating! Let stand for 2-3 minutes before serving. Stir again and check the temperature. Recommended serving temperature: between 30-40 °C.

BABY MILK:

Pour milk into a sterilised glass bottle. Reheat uncovered. Never heat a baby's bottle with teat on, as the bottle may explode if overheated. Shake well before standing time and again before serving ! Always carefully check the temperature of baby milk or food before giving it to the baby. Recommended serving temperature: ca. 37 °C.

REMARK:

Baby food particularly needs to be checked carefully before serving to prevent burns. Use the power levels and times in the next table as a guide lines for reheating.

Reheating Liquids and Food

Use the power levels and times in this table as a guide lines for reheating.

Food	Serving Size	Power	Time (min.)
Drinks (Coffee, Tea and Water)	150 ml (1 cup) 300 ml (2 cups) 450 ml (3 cups) 600 ml (4 cups)	900 W	1-1½ 2-2½ 3-3½ 3½-4
	Instructions Pour into cups and reheat uncovered: 1 cup in the centre, 2 cups opposite of each other, 3 cups in a circle. Keep in microwave oven during standing time and stir well. Stand for 1-2 minutes.		
Soup (Chilled)	250 g 350 g 450 g 550 g	900 W	2½-3 3-3½ 3½-4 4½-5
	Instructions Pour into a deep ceramic plate or deep ceramic bowl. Cover with plastic lid. Stir well after reheating. Stir again before serving. Stand for 2-3 minutes.		
Stew (Chilled)	350 g	600 W	4½-5½
	Instructions Put stew in a deep ceramic plate. Cover with plastic lid. Stir occasionally during reheating and again before standing and serving. Stand for 2-3 minutes.		
Pasta with Sauce (Chilled)	350 g	600 W	3½-4½
	Instructions Put pasta (e.g. spaghetti or egg noodles) on a flat ceramic plate. Cover with microwave cling film. Stir before serving. Stand for 3 minutes.		
Filled Pasta with Sauce (Chilled)	350 g	600 W	4-5
	Instructions Put filled pasta (e.g. ravioli, tortellini) in a deep ceramic plate. Cover with plastic lid. Stir occasionally during reheating and again before standing and serving. Stand for 3 minutes.		
Plated Meal (Chilled)	350 g 450 g	600 W	4½-5½ 5½-6½
	Instructions Plate a meal of 2-3 chilled components on a ceramic dish. Cover with microwave cling-film. Stand for 3 minutes.		
Cheese Fondue Ready-To-Serve (Chilled)	400 g	600 W	6-7
	Instructions Put the ready-to-serve cheese fondue in a suitable sized glass pyrex bowl with lid. Stir occasionally during and after reheating. Stir well before serving. Stand for 1-2 minutes.		

MG28F303EAW_EF_DE68-04179L-00_EN.indd 26 2014-04-11 8:24:04

Reheating Baby Food and Milk

Use the power levels and times in this table as guide lines for reheating.

Food	Serving Size	Power	Time
Baby Food (Vegetables + Meat)	190 g	600 W	30 sec.
	Instructions Empty into ceramic deep plate. Cook covered. Stir after cooking time. Before serving, stir well and check the temperature carefully. Stand for 2-3 minutes.		
Baby Porridge (Grain + Milk + Fruit)	190 g	600 W	20 sec.
	Instructions Empty into ceramic deep plate. Cook covered. Stir after cooking time. Before serving, stir well and check the temperature carefully. Stand for 2-3 minutes.		
Baby Milk	100 ml 200 ml	300 W	30-40 sec. 1 min. to 1 min. 10 sec.
	Instructions Stir or shake well and pour into a sterilised glass bottle. Place into the centre of turn-table. Cook uncovered. Shake well and stand for at least 3 minutes. Before serving, shake well and check the temperature carefully.		

DEFROSTING

Microwaves are an excellent way of defrosting frozen food. Microwaves gently defrost frozen food in a short period of time. This can be of great advantage, if unexpected guests suddenly show up.

Frozen poultry must be thoroughly thawed before cooking. Remove any metal ties and take it out of any wrapping to allow thawed liquid to drain away.

Put the frozen food on a dish without cover. Turn over half way, drain off any liquid and remove any giblets as soon as possible. Check the food occasionally to make sure that it does not feel warm.
If smaller and thinner parts of the frozen food start to warm up, they can be shield by wrapping very small strips of aluminium foil around them during defrosting.

Should poultry start to warm up on the outer surface, stop thawing and allow it to stand for 20 minutes before continuing. Leave the fish, meat and poultry to stand in order to complete defrosting. The standing time for complete defrosting will vary depending on the quantity defrosted. Please refer to the table below.

Hint: Flat food defrosts better than thick and smaller quantities need less time than bigger ones. Remember this hint while freezing and defrosting food.

For defrosting of frozen food with a temperature of about -18 to - 20 °C, use the following table as a guide.

Food	Serving Size	Power	Time (min.)
Meat			
Minced Meat	250 g 500 g	180 W	6-7 9-12
Pork Steaks	250 g	180 W	5-7
	Instructions Place the meat on turntable. Shield thinner edges with aluminium foil. Turn over after half of defrosting time! Stand for 15-30 minutes.		

(continued)

MG28F303EAW_EF_DE68-04179L-00_EN.indd 27 2014-04-11 8:24:04

Food	Serving Size	Power	Time (min.)
Poultry			
Chicken Pieces	500 g (2 pcs)	180 W	14-15
Whole Chicken	1200 g	180 W	32-34
	Instructions First, put chicken pieces first skin-side down, whole chicken first breast-side-down on a flat ceramic plate. Shield the thinner parts like wings and ends with aluminium foil. Turn over after half of defrosting time! Stand for 15-60 minutes.		
Fish			
Fish Fillets	200 g	180 W	6-7
Whole Fish	400 g	180 W	11-13
	Instructions Put frozen fish in the middle of a flat ceramic plate. Arrange the thinner parts under the thicker parts. Shield narrow ends of fillets and tail of whole fish with aluminium foil. Turn over after half of defrosting time! Stand for 10-25 minutes.		
Fruit			
Berries	300 g	180 W	6-7
	Instructions Spread fruit on a flat, round glass dish (with a large diameter). Stand for 5-10 minutes.		
Bread			
Bread Rolls (Each ca. 50 g)	2 pcs 4 pcs	180 W	1-1½ 2½-3
Toast/Sandwich	250 g	180 W	4-4½
German Bread (Wheat + Rye Flour)	500 g	180 W	7-9
	Instructions Arrange rolls in a circle or bread horizontally on kitchen paper in the middle of turntable. Turn over after half of defrosting time! Stand for 5-20 minutes.		

GRILL

The grill-heating element is located underneath the ceiling of the cavity. It operates while the door is closed and the turntable is rotating. The turntable's rotation makes the food brown more evenly. Preheating the grill for 3-5 minutes will make the food brown more quickly.

Cookware for grilling:
Should be flameproof and may include metal. Do not use any type of plastic cookware, as it can melt.

Food suitable for grilling:
Chops, sausages, steaks, hamburgers, bacon and gammon rashers, thin fish portions, sandwiches and all kinds of toast with toppings.

Important remark:
Whenever the grill only mode is used, please remember that food must be placed on the high rack, unless another instruction is recommended.

MICROWAVE + GRILL

This cooking mode combines the radiant heat that is coming from the grill with the speed of microwave cooking. It operates only while the door is closed and the turntable is rotating. Due to the rotation of the turntable, the food browns evenly. Three combination modes are available with this model:
600 W + Grill, 450 W + Grill and 300 W + Grill.

Cookware for cooking with microwaves + grill
Please use cookware that microwaves can pass through. Cookware should be flameproof. Do not use metal cookware with combination mode. Do not use any type of plastic cookware, as it can melt.

Food suitable for microwaves + grill cooking:
Food suitable for combination mode cooking include all kinds of cooked food which need reheating and browning (e.g. baked pasta), as well as foods which require a short cooking time to brown the top of the food. Also, this mode can be used for thick food portions that benefit from a browned and crispy top (e.g. chicken pieces, turning them over half way through cooking). Please refer to the grill table for further details.

Important remark:
Whenever the combination mode (microwave + grill) is used, the food should be placed on the high rack, unless another instruction is

MG28F303EAW_EF_DE68-04179L-00_EN.indd 28 2014-04-11 8:24:04

recommended. Please refer to the instructions in the following chart.
The food must be turned over, if it is to be browned on both sides.

Grill Guide for fresh and frozen foods

Preheat the grill with the grill-function for 3 minutes.
Use the power levels and times in this table as guide lines for grilling.
Use oven gloves when taking out.

Fresh Food	Serving Size	Power	1 step (min.)	2 step (min.)
Toast Slices	4pcs (each 25 g)	Grill only	3-4	2-3
	Instructions Put toast slices side by side on the high rack.			
Grilled Tomatoes	400 g (2 pcs)	300 W + Grill	5-6	-
	Instructions Cut tomatoes into halves. Put some cheese on top. Arrange in a circle in a flat glass pyrex dish. Place it on the high rack. Stand for 2-3 minutes.			
Tomato-Cheese Toast	4 pcs (300 g)	300 W + Grill	4 -5	-
	Instructions Toast the bread slices first. Put the toast with topping on the high rack. Stand for 2-3 minutes			
Baked Potatoes	500 g	600 W + Grill	7-8	-
	Instructions Cut potatoes into halves. Put them in a circle on the high rack with the cut side to the grill.			
Frozen Lasagne	400 g	300 W + Grill Grill only	18½-19½ 1-2	-
	Instructions Put the fresh gratin into a small ovenproof dish. Put the dish on the turntable. After cooking stand for 2-3 minutes.			
Baked Apples	2 apples (ca. 400 g)	300 W + Grill	7-8	-
	Instructions Core the apples and fill them with raisins and jam. Put some almond slices on top. Put apples on a flat glass pyrex dish. Place the dish directly on the low rack.			
Chicken Pieces	500 g (2 pcs)	300 W + Grill	8-10	6-8
	Instructions Brush chicken pieces with oil and spices. Put them in a circle on the high rack. After grilling stand for 2-3 minutes.			
Roast Chicken	1200 g	450 W + Grill turnover 450 W + Grill	19-21	 19-21
	Instructions Brush the chicken oil and spices. Put in an ovenproof dish and place on turntable. After grilling stand for 5 minutes.			
Roast Fish	400-500 g	300 W + Grill	5-7	5½-6½
	Instructions Brush skin of whole fish with oil and add herbs and spices. Put two fish side by side (head to tail) on the high rack. After grilling stand for 2-3 minutes.			

MG28F303EAW_EF_DE68-04179L-00_EN.indd 29 2014-04-11 8:24:04

TIPS AND TRICKS

MELTING CRYSTALLIZED HONEY

Put 20 g crystallized honey into a small deep glass dish.
Heat for 20-30 seconds using 300 W, until honey is melted.

MELTING GELATINE

Lay dry gelatine sheets (10 g) for 5 minutes into cold water.
Put drained gelatine into a small glass pyrex bowl.
Heat for 1 minute using 300 W.
Stir after melting.

COOKING GLAZE/ICING (FOR CAKE AND GATEAUX)

Mix instant glaze (approximately 14 g) with 40 g sugar and 250 ml cold water.
Cook uncovered in a glass pyrex bowl for 3½ to 4½ minutes using 900 W, until glaze/icing is transparent. Stir twice during cooking.

COOKING JAM

Put 600 g fruits (for example mixed berries) in a suitable sized glass pyrex bowl with lid. Add 300 g preserving sugar and stir well.
Cook covered for 10-12 minutes using 900 W.
Stir several times during cooking. Empty directly into small jam glasses with twist-off lids. Stand on lid for 5 minutes.

COOKING PUDDING/ CUSTARD

Mix pudding powder with sugar and milk (500 ml) by following the manufacturers instructions and stir well. Use a suitable sized glass pyrex bowl with lid. Cook covered for 6½ to 7½ minutes using 900 W.
Stir several times well during cooking.

BROWNING ALMOND SLICES

Spread 30 g sliced almonds evenly on a medium sized ceramic plate.
Stir several times during browning for 3½ to 4½ minutes using 600 W.
Let it stand for 2-3 minutes in the oven. Use oven gloves while taking out!

troubleshooting and error code

TROUBLESHOOTING

If you have any of the problems listed below try the solutions given.

This is normal.

- Condensation inside the oven.
- Air flow around the door and outer casing.
- Light reflection around the door and outer casing.
- Steam escaping from around the door or vents.

The oven does not start when you press the START/+30s button.

- Is the door completely closed?

The food is not cooked at all.

- Have you set the timer correctly and/or pressed the **START/+30s** button?
- Is the door closed?
- Have you overloaded the electric circuit and caused a fuse to blow or a breaker to be triggered?

The food is either overcooked or undercooked.

- Was the appropriate cooking length set for the type of food?
- Was an appropriate power level chosen?

The light bulb is not working.

- The Light bulb should not be replaced in person for safety reasons. Please contact nearest authorised Samsung customer care, to arrange for a qualified engineer to replace the bulb.

The oven causes interference with radios or televisions.

- Slight interference may be observed on televisions or radios when the oven is operating. This is normal. To solve this problem, install the oven away from televisions, radios and aerials.
- If interference is detected by the oven's microprocessor, the display may be reset. To solve this problem, disconnect the power plug and reconnect it. Reset the time.

MG28F303EAW_EF_DE68-04179L-00_EN.indd 30 2014-04-11 8:24:05

Sparking and cracking occur inside the oven (arcing).

- Have you used a dish with metal trimmings?
- Have you left a fork or other metal utensil inside the oven?
- Is aluminum foil too close to the inside walls?

Smoke and bad smell when initial operating.

- It's a temporary condition by new component heating. Smoke and smell will disappear completely after 10 minutes operation.
  To remove smell more quickly, please operate microwave oven with putting lemon formation or lemon juice in the cabinet.

If the above guidelines do not enable you to solve the problem, then contact your local SAMSUNG customer service centre.
Please have the following information read;

- The model and serial numbers, normally printed on the rear of the oven
- Your warranty details
- A clear description of the problem

Then contact your local dealer or SAMSUNG aftersales service.

technical specifications

SAMSUNG strives to improve its products at all times. Both the design specifications and these user instructions are thus subject to change without notice.

Model	MG28F303E**, MG28F304E**
Power source	230 V ~ 50 Hz
Power consumption	
Microwave	1400 W
Grill	1500 W
Combined mode	2900 W
Output power	100 W / 900 W (IEC-705)
Operating frequency	2450 MHz
Magnetron	OM75P(31)
Cooling method	Cooling fan motor
Dimensions (W x H x D)	
Outside	517 x 297 X 444 mm
Oven cavity	357 X 255 X 357 mm
Volume	28 liter
Weight	
Net	16 kg approx

MG28F303EAW_EF_DE68-04179L-00_EN.indd 31 2014-04-11 8:24:05

QUESTIONS OR COMMENTS

COUNTRY	CALL	OR VISIT US ONLINE AT
AUSTRIA	0800 - SAMSUNG (0800 - 7267864)	www.samsung.com/at/support
BELGIUM	02-201-24-18	www.samsung.com/be/support (Dutch) www.samsung.com/be_fr/support (French)
DENMARK	70 70 19 70	www.samsung.com/dk/support
FINLAND	030-6227 515	www.samsung.com/fi/support
FRANCE	01 48 63 00 00	www.samsung.com/fr/support
GERMANY	0180 6 SAMSUNG bzw. 0180 6 7267864* (*0,20 €/Anruf aus dem dt. Festnetz, aus dem Mobilfunk max. 0,60 €/Anruf)	www.samsung.com/de/support
ITALIA	800-SAMSUNG (800.7267864)	www.samsung.com/it/support
CYPRUS	8009 4000 only from landline, toll free	www.samsung.com/gr/support
GREECE	80111-SAMSUNG (80111 726 7864) only from land line (+30) 210 6897691 from mobile and land line	
LUXEMBURG	261 03 710	www.samsung.com/support
NETHERLANDS	0900-SAMSUNG (0900-7267864) (€ 0,10/Min)	www.samsung.com/nl/support
NORWAY	815 56480	www.samsung.com/no/support
PORTUGAL	808 20 7267	www.samsung.com/pt/support
SPAIN	0034902172678	www.samsung.com/es/support
SWEDEN	0771 726 7864 (SAMSUNG)	www.samsung.com/se/support
SWITZERLAND	0848 726 78 64 (0848-SAMSUNG)	www.samsung.com/ch/support (German) www.samsung.com/ch_fr/support (French)
U.K	0330 SAMSUNG (7267864)	www.samsung.com/uk/support
EIRE	0818 717100	www.samsung.com/ie/support

DE68-04179L-00